selected manners to visually convey the luminescent imagery of the present invention.

For the illustrated embodiment, visualization agent **204** is responsible for invoking

visualization controller **212** to direct the activations and deactivations of LEDs **214** to

achieve the desired visualization for a corresponding luminescent pattern. More

5   specifically, visualization agent **204** is responsible for invoking visualization controller

212 to direct LEDs **214** to effectuate visual conveyance of various luminescent patterns.

For the illustrated embodiment, visualizer controller **212** advantageously offers at

least two manners in which a visualization agent may request a visualization operation

or operations to be performed. These two manners include a first manner where a

10   singular round of activation and deactivation of LEDs **214** may be requested, and a

second manner where a number of rounds or sequences of activation and deactivation

of LEDs **214** may be simultaneously requested via a single request.

In one embodiment, the first manner is requested via a function call to

visualization controller **212**, providing visualization controller **212** with the identifiers of

15   LEDs **214** to be activated, as well as optional durations of activation. For this

embodiment, all other unspecified LEDs **214** are assumed to remain deactivated. In an

alternate embodiment, visualization agent **204** may send commands to visualization

controller **212** at regular or irregular intervals with each command including a

specification stipulating whether each LED is to be set to on or off. In alternate

20   embodiments, group specifications in particular, an "ALL" LED group may be

advantageously supported. Additionally, in various embodiments, the intensity or

brightest of each LED may be specified (e.g. by way of an intensity/brightness index in

the range e.g. of 0 through 16). Further, for multi-colored LEDs, the color may be specified.

In one embodiment, the second manner is requested via a function call to visualization controller **212**, providing visualization controller **212** with a pointer to a starting location in the included memory of wireless mobile phone **200**, where a data structure containing a series of rounds or cycles of activation and deactivation specifications is stored. The function call, in addition to the pointer, also includes the size of the data structure. In alternate embodiments, a predetermined end of structure demarcation may be employed, in lieu of a size specification. In other embodiments, visualization controller **212** may be given an encoded set of instructions used to produce visualization picture elements for one or more round/cycle (i.e. "Frame"). For each frame of activation and deactivation, the LEDs to be turned on and off are identified. For example, for a row of eight LEDs, the LEDs to be turned on and off for a round or cycle may be specified by the "vector" [01010111] with "0" denoting an "off" state and "1" denoting an "on" state. In alternate embodiments, other manners of specification as well as other manners of providing the specification may be employed instead. Further, as before, the intensity/brightness as well as color (in the case of multi-color LEDs) may be specified.

The above-described approaches are just two exemplary approaches where a visualization agent may request visualization controller **212** to selectively activate and deactivate LEDs **214** on its behalf. Further in the illustrated embodiment, visualization agent **204** is provided to facilitate the conveyance of the desired visualizations, such that the desired visualizations may be achieved without requiring or merely requiring a

relatively small amount of modifications to the main line logic or operational components

of wireless mobile phone **200**. However, in embodiments where the earlier described

"request" interface of visualization controller **212** is practiced, the visualization services

offered by visualization controller **212** may also be directly invoked by the other

5   components of wireless mobile phone **200** instead, should direct incorporation of the

required logic into these other components of wireless mobile phone **200** to practice the

present invention be desirable. Thus, generically, a visualization requestor, whether it is

an "intervening" agent like visualization agent **204** or a functional "principal" (such as the

component responsible for incoming call notification), may be referred to as a

10   visualization "client".

Figure 3 is a block diagram illustrating a functional view of one embodiment of a

communication server incorporating the teachings of the present invention. As

illustrated, in accordance with the present invention, communication server **300** includes

15   server visualization agent **304** providing registration services **305**, pattern selection

services **306**, and synchronization services **307**. Communication server **300** further

includes visualization configuration records **310** and transmit/receive interface **312**.

Although communication server **300** may include additional functional elements such as

an operating system, various device drivers and additional system services, these

20   elements have been omitted from the illustrated embodiment for the purpose of clarity.

In accordance with the teachings of the present invention, communication server

300 facilitates the display of one or more luminescent patterns by participating ones of

wireless mobile devices **108**. In one embodiment, communication server **300** identifies